

**Texas Commission On Environmental Quality**

**EPA Federal  
Revised Total Coliform Rule (RTCR)**

**Level 1 and Level 2 Assessment  
Overview**



TCEQ

Office of Water

Water Supply  
Division

DWA WG  
Meeting

April 18, 2017





# TCEQ Public Drinking Water Section

**James Beauchamp**, Special Assistant

RTCR Rule Project Manager/RTCR Team Leader

Water Supply Division/Drinking Water Standards Section

[James.Beauchamp@tceq.texas.gov](mailto:James.Beauchamp@tceq.texas.gov) or

(512) 239-6174

Additional contact information

[TCRDATA@tceq.texas.gov](mailto:TCRDATA@tceq.texas.gov) or [DWA WG@tceq.texas.gov](mailto:DWA WG@tceq.texas.gov) or

(512) 239-4691





## Level 1 and Level 2 Assessment Overview

- **March 3, 2017** – TCEQ sent to the DWA WG Stakeholders the REVISED Level 1 and Level 2 Assessment forms for review and feedback.
- **March 17, 2017** – TCEQ received feedback from DWA WG Stakeholders and is incorporating these comments into the final assessment forms.



# 1.0 – Assessments and Corrective Actions

## Level 1 and Level 2 Assessments

The RTCR requires PWSs that have an indication of coliform contamination as a result of **total coliform (TC) + samples OR *E. coli* MCL (EMCL) violations** to **assess the problem and take corrective action.**

**TWO** levels of assessments

- **Level 1** and **Level 2** - based on the severity or frequency of the problem.





# 1.1 - Assessments and Corrective Actions

## Purpose of Level 1 and Level 2 Assessments

To find Sanitary Defects at the PWS which could provide a pathway of entry for microbial contamination into the distribution system such as:

- inadequate Sampling Protocol or Sample Site
- inadequate treatment or maintenance of residual disinfection levels
- low distribution system pressure
- no backflow protection/cross-connection control
- line breaks
- deteriorated water storage facilities or infrastructure





## 1.2 - Assessments and Corrective Actions

### Deadline for Completing Assessments

#### 40 CFR §141.859

A PWS must complete and submit a Level 1 or Level 2 assessment form to the State **within 30 days** after the system learns that it has exceeded a trigger.

- **Level 1 and 2 assessments** - PWSs must conduct or ensure that an assessment is conducted consistent with State requirements.
- **Level 2 assessments** - PWSs must comply with any expedited actions or additional actions required by the State in the case of an *E. coli* MCL violation.





## 1.3 - Assessments and Corrective Actions

### Deadlines for Completing Corrective Actions (1)

**Sanitary Defects** identified during a **Level 1 or Level 2 Assessment** should be corrected as soon as possible.

The PWS **must** complete **corrective actions** by one of the following timeframes:

- No later than the time the assessment form is submitted to the state, which must be **within 30 days of triggering the assessment**, or
- **Within state-approved timeframe** which was proposed by the PWS in the assessment form.







## 1.4 - Assessments and Corrective Actions

### Deadlines for Completing Corrective Actions (2)

#### 40 CFR §141.859 – Level 1 and Level 2 Assessments

- The Assessment form may also note that **no Sanitary Defects** were identified.
- The Assessment form must be completed and submitted to the State **within 30 days even if no Sanitary Defects were identified.**







## 1.5 - Assessments and Corrective Actions

### Deadlines for Completing Corrective Actions (3) 40 CFR §141.859

- **Consultation** - At any time during the assessment or corrective action phase, either the PWS or the State may request a consultation with the other party to determine the appropriate actions to be taken.
- The PWS may consult with the State on all relevant information that may impact on its ability to comply with a requirement, including the method of accomplishment and an appropriate timeframe.





## 1.6 - Assessments and Corrective Actions

### Level 1 Assessment Triggers

Level 1 Assessment is triggered if any one of the following occurs:

- A PWS collecting **fewer than 40 samples per month** has 2 or more TC+ routine and repeat samples in the same month.
- A PWS collecting **40 or more samples per month** has greater than 5.0 percent of the routine and repeat samples in the same month that are TC+.
- A PWS fails to take every required **repeat** sample after any single TC+ sample.





# 1.7 - Assessments and Corrective Actions

## Level 2 Assessment Triggers

Level 2 Assessment is triggered if any one of the following occurs:

- A PWS incurs an ***E. coli* MCL violation**.
- A PWS has a **second Level 1 Assessment** within a rolling 12-month period,
- **unless** the State has determined a likely reason that the samples that caused the first Level 1 treatment technique trigger were total coliform-positive and has established that the PWS has corrected the problem.
- If the State determines that a PWS is not required to conduct a Level 2 assessment based on the occurrence of a second Level 1A within a rolling 12-month period, **the PWS is still required to conduct an L1A.**  
**(40 CFR §141.859)**





## 1.8 - Assessments and Corrective Actions

### Example of Level 1 and Level 2 Assessor Qualifications

- An understanding of the objectives and structure of the RTCR
- Familiar with bacteriological sampling practices
- A working knowledge of how to interpret:
  - Distribution system water quality data
  - Distribution system operational data
  - Source of supply data
- An understanding of disinfection practices and treatment changes
- Operator certification level appropriate to PWS type/size





## 1.9 - Assessments and Corrective Actions

### Title 30 TAC §290.109(c)(3)(A)(i) – (iii)

#### Level 1 and Level 2 Assessor Qualifications

Level 1 and Level 2 assessments shall be conducted and completed by:

- the **PWS**;
- **licensed operators** as required under §290.46(e); or
- **other parties approved by the TCEQ**.

The PWS, licensed operators, and other parties approved by the TCEQ **shall have also completed training as required by the TCEQ** upon notice to the PWS in writing.





## 1.10 - Assessments and Corrective Actions

**Other parties approved by the TCEQ** include, but not limited to:

- **backflow prevention assembly testers and CSIs;**
- **plumbing inspectors and water supply protection specialists;**
- **licensed professional engineers** (Tx Board of P.E.s);
- **circuit riders** or **technical assistance providers** under contract with the TCEQ or government agency approved by TCEQ; or
- **utility supervisor or manager** supported by various utility staff or other individuals.





## 1.11 - Assessments and Corrective Actions

### Title 30 TAC §290.109(c)(3)(A)(iii)

- **Assessors who have conducted Level 1 assessments** which were determined by the executive director to be **insufficient or inadequate** may be required to **complete additional training or obtain certifications** as prescribed by the TCEQ.







## 2.0 - Major Violations

### *E. coli* Maximum Contaminant Level (MCL)

#### *E. coli* MCL Violation Occurs with the Following Sample Result Combination

Routine	Repeat
EC+	TC+
EC+	Any missing sample
EC+	EC+
TC+	EC+
TC+	TC+ (but no <i>E. coli</i> analysis)





## 2.1 - Major Violations

### *E. coli* Maximum Contaminant Level (MCL) Violation

- **Public Notice (PN)** - An *E. coli* MCL violation requires a PWS to issue a PN under 30 TAC §290.122(a)(1) for acute violations or situations.
- **Boil Water Notice (BWN)** - An *E. coli* MCL violation requires a PWS to issue a BWN under 30 TAC §290.46(q)(3) and §290.122(a)(2)(A) for acute microbiological or turbidity violation.





## 2.2 - Major Violations

### Treatment Technique Violation

- Failure to conduct a **Level 1 or Level 2** Assessment within 30 days of a trigger.
- Failure to **correct all sanitary defects** from a Level 1 or Level 2 Assessment **within 30 days** of a trigger or in accordance with the state-approved timeframe.
- Failure of a **seasonal system** to complete **state-approved start-up procedures** prior to serving water to the public.





## 2.3 - Monitoring(M) & Reporting(R) Violations

### RTCR

- **Monitoring** violations and **Reporting** violations will be tracked separately as **2 different violation types**
- Newly specified M/R violations:
  - **M** - Failure to **take every required routine** or additional routine sample in a compliance period.
  - **M** - Failure to **analyze for *E. coli*** following a TC+ routine sample.
  - **R** - Failure to **submit a monitoring report or completed assessment form** after monitoring or conducting assessment correctly/timely.
  - **R** - Failure to **notify the state following an *E. coli* +** sample.
  - **R** - Failure to **submit certification of completion of state-approved start-up procedure** by a seasonal system.



## 2.4 - Public Notice for MCL-TT-M&R Violations

RTCR	
<i>E. coli</i> MCL violations (24 hours)	Tier 1
Treatment technique (TT) violations (30 days)	Tier 2
Monitoring (Annual/or elevated to T1 or T2)	Tier 3
Reporting (Annual/or elevated to T1 or T2)	Tier 3



## 2.5 - PN for L1 and L2 Recordkeeping Violation

### Public Notice for Failure to Maintain L1 and L2 Assessment Documentation

- **Recordkeeping** - PWSs must maintain any assessment form and documentation of sanitary defects and corrective actions completed as a result of assessments for a period not less than **five years** after completion. (*40 CFR §141.861(b) - RTCR*)
- **Public Notice** - PWSs must provide public notice for **Reporting** and **Recordkeeping** violations under the RTCR. (*§141.204(a) - Tier 3 Public Notice*)





## 3.0 - TCEQ Technical Assistance

- TCEQ will provide updated training to TCEQ's Financial, Managerial, and Technical (FMT) contractor concerning **Level 1 assessment** requirements **once the forms are finalized**.
- TCEQ is providing on-site technical assistance to PWSs that trigger a **Level 2 assessment**.







# Questions?





## RTCR Information

### TCEQ's RTCR Website

<http://www.tceq.texas.gov/goto/RTCR>

Or Search: TCEQ RTCR

### EPA's RTCR Guidance

can be found at:

[http://water.epa.gov/lawsregs/rulesregs/sdwa/tcr/regulation\\_revisions.cfm](http://water.epa.gov/lawsregs/rulesregs/sdwa/tcr/regulation_revisions.cfm)





# TCEQ Water Supply Division

**James Beauchamp**, Special Assistant - Drinking Water Standards Section  
RTCR Rule Project Manager/RTCR Team Leader

[James.Beauchamp@tceq.texas.gov](mailto:James.Beauchamp@tceq.texas.gov) or (512) 239-6174

**Gary Chauvin**, Manager - Drinking Water Standards Section

[Gary.C Chauvin@tceq.texas.gov](mailto:Gary.C Chauvin@tceq.texas.gov) or (512) 239-1687

**Joel Klumpp**, Manager - Plan & Technical Review Section

[Joel.Klumpp@tceq.texas.gov](mailto:Joel.Klumpp@tceq.texas.gov) or (512) 239-4453

**Michele Risko**, Manager - Drinking Water Special Functions Section

[Michele.Risko@tceq.texas.gov](mailto:Michele.Risko@tceq.texas.gov) or (512) 239-1689

**Additional contact information** [TCRDATA@tceq.texas.gov](mailto:TCRDATA@tceq.texas.gov) or

[DWA WG@tceq.texas.gov](mailto:DWA WG@tceq.texas.gov) or (512) 239-4691





# TCEQ Public Drinking Water Standards Section RTCR Contacts

**Jasmine Oliveira**, RTCR Compliance Officer

Drinking Water Quality Team

[Jasmine.Oliveira@tceq.texas.gov](mailto:Jasmine.Oliveira@tceq.texas.gov) or (512) 239-6141

**Nicole Larison**, RTCR Compliance Officer

Drinking Water Quality Team

[Nicole.Larison@tceq.texas.gov](mailto:Nicole.Larison@tceq.texas.gov) or (512) 239-6105





## Contact Information

**James Beauchamp**

**Texas Commission on Environmental Quality**

**Drinking Water Standards Section**

**(512) 239-6174**

**[James.Beauchamp@tceq.texas.gov](mailto:James.Beauchamp@tceq.texas.gov)**

**or**

**[TCRDATA@tceq.texas.gov](mailto:TCRDATA@tceq.texas.gov)**

**[DWA WG@tceq.texas.gov](mailto:DWA WG@tceq.texas.gov)**

**(512) 239-4691**

**TCEQ**

**Office of Water**

**Water Supply  
Division**

**DWA WG  
Meeting**

**April 18, 2017**

